CLAIMS

1. A method for providing synchronization in a communication network wherein data is transferred on
5 bitstreams in frames, each frame of a bitstream being defined by a recurrent frame synchronization signal that is transmitted on said bitstream, said method comprising the steps of:
      detecting a recurrent frame synchronization signal
10 on a bitstream of said network;
      generating information relating to a frame synchronization status depending at least in part on the detected recurrent frame synchronization signal; and
      transmitting said information to a frame synch-
15 ronization providing node of said network, said information preferably being used at said frame synchronization providing node for affecting the provision of said recurrent frame synchronization signal based thereupon.
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2. A method as claimed in claim 1, wherein said information is transmitted to said frame synchronization providing node of said network using one or more time slots of one or more bitstreams of said network.

3. A method as claimed in claim 1 or 2, wherein said controlling of the transmission of said recurrent frame synchronization information comprises controlling the size of one or more frames of a bitstream of said
30 network.

4. A method as claimed in claim 3, wherein said controlling of the size of one or more frames comprises controlling the number of slots provided in said one of
35 more frames.

5. A method as claimed in any one of the preceding claims, wherein said method is performed at a switch node that is arranged to switch data between time slots of a first bitstream and a second bitstream of said network, and wherein:

said detecting step comprises determining a frame drift between said first bitstream and said second bitstream;

said generating step comprises generating information relating to a so-determined frame drift; and

said transmitting step comprises transmitting said information relating to said frame drift to at least said frame synchronization providing node of said network, said data preferably being used at said frame synchronization providing node for affecting the provision of said recurrent frame synchronization signal based thereupon for eliminating said frame drift.

6. A method as claimed in any one of the preceding claims, wherein said frames are divided into time slots.

7. A method as claimed in claim 6, wherein circuit-switched channels are established on said bitstreams, each channel comprising a respective set of one or more time slots of the frames of the one or more bitstreams over which it is established.

8. A method for providing synchronization in a communication network, said method comprising the steps of:

providing, at a node of the network, a bitstream with a recurrent frame synchronization signal defining recurrent frames on said bitstream;

receiving information relating to a frame synchronization situation, at least partly depending on said recurrent frame synchronization signal, as determined at another node of the network; and

affecting, at said a node, the provision of said recurrent frame synchronization signal on said bitstream based upon said information.

5   9. A method as claimed in claim 8, wherein said information comprises phase drift information and wherein said affecting of the provision of said recurrent frame synchronization signal aims to eliminate said frame drift.

10   10. Method as claimed in claim 9, wherein said step of affecting the provision of said recurrent frame synchronization signal comprises controlling the size of said frames on said a bitstream.

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11. Method as claimed in claim 10, wherein said controlling of the frame rate comprises controlling the number of slots provided in one of more frames of said a bitstream.

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12. A method as claimed in any one of claims 8-11, wherein said frames are divided into time slots.

13. A method as claimed in claim 12, wherein
25   circuit-switched channels are established on said bit-streams, each channel comprising a respective set of one or more time slots of the frames of the one or more bitstreams over which it is established.

14. An apparatus for providing synchronization in a
30   communication network wherein data is transferred on bitstreams in frames, each frame of a bitstream being defined by a recurrent frame synchronization signal that is transmitted on said bitstream, comprising:
35   means (110) for detecting a recurrent frame synchro-nization signal on a bitstream of said network;

means (120) for generating information relating to a frame synchronization situation that depends at least in part on the detected recurrent frame synchronization signal; and

5   means (112) for transmitting said information to a frame synchronization providing node of said network, said information preferably being used at said frame synchronization providing node for affecting provisions of said recurrent frame synchronization signal into said
10   bitstream based thereupon.

15. An apparatus as claimed in claim 14, wherein said transmitting means are provided to transmit said information to said frame synchronization providing node
15   of said network using one or more time slots of one or more bitstreams of said network.

16. An apparatus as claimed in claims 14 or 15, wherein said apparatus is arranged to switch data between
20   a first bitstream and a second bitstream of said network, and wherein:

said detecting means comprises means for determining a frame relationship between said first bitstream and said second bitstream;
25   said information is generated by said generation means to comprise information on said frame relationship.

17. An apparatus as claimed in claim 16, wherein said information on said frame relationship as generated
30   by said generation means comprises information on any determined frame drift between said first bitstream and said second bitstream.

18. An apparatus for providing synchronization in a
35   communication network, comprising:

means (112, 118) for providing, at a node or the network, a bitstream with a recurrent frame synchroniza-tion signal defining recurrent frames on said bitstream;

means (102, 106) for receiving data relating to a
5   frame synchronization situation, which at least partly affected by said frame synchronization signal, as determined at another node of the network; and

means (118) for controlling the transmission of said recurrent frame synchronization signal into said a
10 bitstream based upon said information.

19. Apparatus as claimed in claim 18, wherein said information comprises phase drift information and wherein the controlling means are arranged to adjust the
15 transmissions of said recurrent frame synchronization signal with the purpose of eliminating said frame drift.

20. Apparatus as claimed in claim 18 or 19, wherein said means for controlling the transmission of said re-
20 current frame synchronization information comprises means for adjusting the size of one or more frames of said a bitstream.

21. Apparatus as claimed in claim 20, wherein said
25 means for controlling the transmission of said recurrent frame synchronization information comprises means for adjusting the number of slots provided within said one of more frames of said a bitstream.

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